

Receiving Report

Date: 14/4/8

Batch No: M128799

Supplier: B/E

Dart P/O: 23652

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☒ No ☐
 Receipt: Cash ☐ Cr ☒
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC18 Inspection ☐ N/A ☒
 Work Order ☐ N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver

QC12

Production/Admin:

Date _____
 Received/Costing _____
 Initial _____

Location _____



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO23652

Purchase Order Date 4/4/2014

PO Print Date 4/4/2014

Page Number 1 of 3

Order From :

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

VU-BEA001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	MS27039-1-12	Screw	4/9/2014 Yes 4/9/2014	FN	200.00 Each	\$0.09	\$18.00
Line Total:							\$18.00
2	MS27039-08-10	Screw	4/9/2014 Yes 4/9/2014		2,000.00 Each	\$0.08	\$160.00
Line Total:							\$160.00
3	MS21919WDG20	Clamp	4/9/2014 Yes 4/9/2014		20.00 Each	\$1.07	\$21.40

Note:

4/4/2014



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1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
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Buyer

Chantal Lavoie

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10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Total: \$21.40

4	MS171539	Pin	4/9/2014	20.00	✓	\$0.80	\$16.00
	332		Yes	Each			
			4/9/2014				

Line Total: \$16.00

5	71401-45	PROCUREMENT QUALITY CLAUSES	4/9/2014	1.00		\$0.00	\$0.00
			No	Each			
			4/9/2014				

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT

A033 STATEMENT OF CONFORMITY/TEST RECORDS

FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

Line Total: \$0.00

Note:

4/4/2014



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
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Ship Via: FedEx PI collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

PO Total:

\$215.40

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 4/4/2014



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: P023652

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
2	2000	EA	MS27039-0810		63853	MAC FASTENERS	0RFT4		


Jason Lewis
Vice President of Quality

04/08/14

MACFASTENERS, INC.

1110 Enterprise Street

Ottawa, KS 66067

Phone: 785-242-8812

Fax: 785-242-4616

Packing List

Bill B/E AEROSPACE CONSUMABLES MGMT

To: 10000 NW 15TH TERRACE

MIAMI, FL 33172

Ship B/E AEROSPACE CONSUMABLES MGMT

To: 9835 NW 14th Street

Miami, FL 33172

United States

Shipment No: 62281

Shipment Date: 02/04/14

Ship Via: United Parcel Service

Order Number: 45869

Order Date: 07/23/12

Customer Code: BE AEROSPACE

Phone: (305) 925-2600

PO Number: OJWA02

Terms: Net 30 Days

LOT #63853

<u>Item</u>	<u>Quantity</u>				<u>Unit</u>	<u>Description</u>	<u>Job Number</u>
	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>			
2	125,000	140,000	0		M	MS27039-08-10 Screw machine pan head structural cross recessed	63853

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0JWA02

PART NUMBER: MS27039-0810

REV: 4

LOT NUMBER: 63853

MANUFACTURED QUANTITY: 140,000

MILL HEAT NUMBER: 8172051

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 02/03/14


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company- SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 EAST ENTERPRISE
OTTAWA, KS 66067

CHEMICAL & PHYSICAL TEST REPORT

CUSTOMER B/E AEROSPACE	PO NUMBER OJWA02	MFG QUANTITY 140,000	DATE 02/03/14
PART NUMBER MS27039-0810	REV 4	LOT NO 63853	PROCUREMENT SPEC NASM7839

MATERIAL TYPE 8740				MATERIAL SPECIFICATION MIL-S-6049/AMS6322				MILL HEAT NUMBER 8172051			SUPPLIER JOHNSTOWN		
C .40	Si .25	Mn .86	P .010	S .11	Cu .09	Ni .44	Cr .49	Mo .22	V .003	B	Fe	Al .026	Ti
	Co	N .0043	Bi	Pb	Mg	Zn		Nb	Sn .006			Other	

MECHANICAL TEST RESULTS - TESTING PER NASM1312

ULTIMATE TENSILE STRENGTH POUNDS	
2,450	2,390
2,530	2,440
2,450	2,480
2,480	2,450
2,490	2,460
2,510	
2,490	
2,470	
MIN. REQ.	1,750

DOUBLE SHEAR STRENGTH POUNDS / PSI
TOO SHORT TO TEST PER NASM1312-13
MIN. REQ.

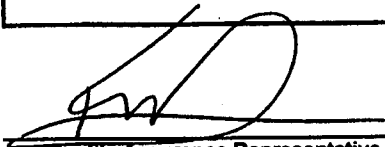
HARDNESS	
ROCKWELL "C" SCALE	
REQ.	26 - 32 HRC
SAMPLE SIZE	13
ACTUAL RESULTS	
28 - 30 HRC	

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection FED-STD-H28/20 - ASME B1.3	System <input type="checkbox"/> 21	System <input checked="" type="checkbox"/> 22	System <input type="checkbox"/> 23

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>
Magnetic Permeability ASTM A342 less than 2.0	<input type="checkbox"/>

TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.


 Quality Assurance Representative

AS9100C REGISTERED
SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE: 02/03/14

PO NUMBER: 0JWA02

MANUFACTURED QUANTITY: 140,000

PROCESSOR:

PAULO PRODUCTS KCMO - NADCAP ID 4679

LOT NUMBER: 63853

MATERIAL: TYPE 8740

PART NUMBER: MS27039-0810

REVISION: 4

REQUIRED HARDNESS: 26 - 32 HRC

SAMPLE SIZE: 13

HARDNESS: 28 - 30 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

Notes:

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.



QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company - SAI GLOBAL - 0058029

DE TRAY

Plating Works

Specialized Electro-Plating and Polishing
Nickel
Copper
Decorative Chrome
Satin Chrome
Zinc
Cadmium
Passivate
Bright Dip
Strip Copper
Descale

10405 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052
Phone (816) 252-8411 Fax (816) 252-8527 • E-mail: DeTrayPlating@Aol.com

January 30, 2014

Mac Fasteners
1110 East Enterprise Street
Ottawa, Kansas 66067

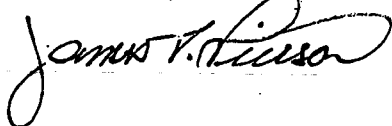
Subject: Certification

This is to certify that the following parts have been cadmium plated per QQ-P416/AMS-QQ-P-416/NAS4160/AMS2400, Type II, Class 2. Please reference our Invoice# 176452 dated 1/30/2014 for:

Lot#- 63853

P.N.- MS27039-08-10

James T. Pierson, Vice-President



DE TRAY PLATING WORKS



Johnstown Wire Technologies

124 Laurel Ave,
Johnstown, PA 15906
Phone: 814-532-5680
Fax: 814-532-5684

WORK ORDER
796993

TEST REPORT
LOT NUMBER
K-8172051
SALES ORDER / RLS
002173 / 2

SOLD TO

Mac Fasteners, Inc.
C/O TD Logistics Inc.
14505 W 100th Street
Lenexa, KS 66215
USA



CUSTOMER P.O. 50516	CUSTOMER PART 8740-.160	QUANTITY 18,440 LBS	COILS 11	LADING NO 00119246	SHIPMENT DATE 08/20/2013	
SPECIFICATION MacFast-87160 AMS2301; AMS6322; AMS-S-6049A; MIL-S-6049A 8740 DFARS TS 95000 PSI Max Defense Federal Acquisition Regulation Supplement Silicon Killed Fine Grain Aircraft Quality/Cold Heading Quality Drawn From Annealed Rod Spheroidize Annealed In Process Heavy Phos & Light Lube Ctd Size: .160 +.001 -.000						
CERTIFICATION REQUIREMENTS						
Chemical						
C .40	Mn .86	P .010	S .011	Si .25	Al .026	Ni .44
Cr .49	Mo .22	Cu .09	V .003			
Cb .001	Ti ???????	N .0043	Sn .006			
Physical						
AMS 2301 0000	J1 58	J10 42	J11 39	J12 38	J2 57	J3 56
	J5 55	J4 56	J6 54	J7 51	J8 48	J9 45
MacroClean E-381 111						
Mechanical						
TEST	UNITS	HIGH	LOW	AVERAGE		
Tensile Str	Lbs/SqIn	90000	87000	88000		
RA Per Cent	Percent	73.2	69.8	72.0		
Decarb FFD	Inches	.000	.000	.000		
Surface def. depth	Inches	.000	.000	.000		
Rod / Melt Source						
Rod Source Republic	Melt Source Republic	Country of Origin USA	Nafta Yes			
End of Certification						

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

Daniel J. Malik
Daniel J. Malik, Director of Quality Assurance



CERTIFICATE OF TESTS

1801 EAST 28TH ST.
PHOENIX 85043-4880LORAIN, OH 44055
FAX: 330-438-8685

REPUBLIC STEEL

6/25/2013
11:08:00 AM
PAGE 1 OF 2PURCHASE ORD: 84083
PART NUMBER: FXT40AA-.3125
ORDER NUMBER: 1547433 - 01
HEAT: 8172051PURCHASE ORDER DATE: 3/4/2013
ACCOUNT NUMBER: 5672-1921-01
SCHEDULE: 4931-93
REVISION: 1

CHARGE ADDRESS

JOHNSTOWN WIRE TECHNOLOGIES
124 LAUREL AVE
JOHNSTOWN, PA 15906

SHIP TO

JOHNSTOWN WIRE TECHNOLOGIES
EDWARD ZAPOLA
C/O C & BL RAILROAD
TRACK 629
JOHNSTOWN, PA 15901

MATERIAL DESCRIPTION

HOT ROLLED STEEL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 EXC PARA
10.3 AMS 6322N EXC HARD JOHNSTOWN WIRE SPEC RW-005 REVISION DTD 12/31/00 EXC SURFACE DEFECTS
JOHNSTOWN WIRE SPEC PART NO. FXT40AA REVISION DTD 12/31/00 MIL S 6049A & AMD 1 COND B-1 EXC MARK &
UT WAIVED EF-AISI-8740-H FINE GRAIN VACUUM DEGAUSS AIRCRAFT QUALITY FIXED PRACTICE QUALITY
RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS
SIZE: RDS .3125 DIAM X COIL
RDS 7.9375MM DIAM X COIL

LADLE CHEMISTRY %

C	MN	P	S	SI	CU	NI	CR
0.40	0.86	0.010	0.011	0.25	0.09	0.44	0.49
V	MO	SN	AL	B	CB	N	
0.003	0.22	0.006	0.026	0.0001	0.001	0.0043	

CALCULATED TESTS

REDUCTION RATIO 1,690.4 TO 1

AUSTENITIC GRAIN SIZE 5 OR FINER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM A29.

SEMI - FINISHED RESULTS

JOMINY HARDNESS TEST SAE J406/ASTM A255
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 22 24 26 28 30 32
58 57 56 55 54 51 48 45 42 39 38 36 34 34 33 32 31 30 29 29 29 28 28

MACRO ETCH TEST ASTM E381/MIL STD 430
ETCHANT: HCL TEMPERATURE: 170
S R C
AVG 1 1 1

MAGNETIC PARTICLE TEST AMS 2301 AMS2304 AMS2300
IND AVG IND AVG
FREQ FREQ SEV SEV
PCE 03 0 0 0 0

FINISHED SIZE RESULTS

DECARBURIZATION TEST SAE J419/ASTM E1077/JIS G550
ETCHANT = NITAL MAGNIFICATION = 100X

	SPIKE	COMPLETE	TOTAL
	INCHES	INCHES	DEPTH
PCE 6585	0.003	0	0.002

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES



CERTIFICATE OF TESTS

1907 EAST 28TH ST.
PHONEX: 330-438-8380

LORAIN, OH 44055
FAX: 330-438-8495

REPUBLIC STEEL

6/25/2013
11:08:00 AM
PAGE 2 OF 2

PURCHASE ORD: 84083
PART NUMBER: FXT40AA-.3125
ORDER NUMBER: 1547433 - 01
HEAT: 8172051

PURCHASE ORDER DATE: 3/4/2013
ACCOUNT NUMBER: 5672-1921-01
SCHEDULE: 4931-93
REVISION: 1

CAPABLE OF SEAM DEPTH 1 $\frac{1}{2}$ MAX DIAMETER NOT LESS THAN .005 MAX

NOTES
CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019, LBL10158, LBL10114, AND ASTM E1085, LBL10184, LBL10188.

REPUBLIC STEEL HEREBY CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN

NOTES (CONTINUED)
ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS BEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

CERTIFICATE OF TESTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.

ALL TESTING HAS BEEN PERFORMED USING THE CURRENT REVISION OF THE TESTING SPECIFICATIONS.

RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FED STATUTES TITLE 18 CHAPTER 47.

THE MATERIAL WAS NOT EXPOSED TO MERCURY OR ANY METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION.

NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

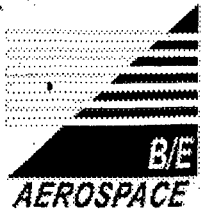
THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED.

SOURCE INFORMATION
MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A
MELT METHOD: EF BLOOM RED. RATIO: 1690.4

END OF DATA CC END OF DATA
WITH SHIPMENT 1 COPY PRINTED AT SHIPPING AREA
FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA 1-814-532-5684
FILE 1 COPY

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7194
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23652

LNE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	CURE DATE	EXP DATE
3	20	EA	MS21919WDG20		UMP86054A	UMPCO	18076	01/01/12	12/31/26


Jason Lewis
Vice President of Quality

04/08/14

Inv # 04/08/14



UMPCO, INC.

MANUFACTURE OF CLAMPS, CLIPS & BRACKETS
7100 LAMPSON AVENUE P.O. BOX 5158 GARDEN GROVE, CA 92846-5158 714-897-3531
WWW.UMPCO.COM

Customer NO.
BEA009

Sales Order NO.
371125



*** THIS IS A BACKORDER ***

ASN

SOLD TO
B/E AEROSPACE

CONSUMABLES MANAGEMENT
P.O. BOX 025263
MIAMI, FL 33102-5263

SHIPPING DEST CODE MIAM

SHIP TO

B/E AEROSPACE CONSUMABLES
MANAGEMENT
9835 NW 14th ST
MIAMI, FL 33172

CLAIMS FOR ERRORS AND ALL DEDUCTIONS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF INVOICE 1 1/2% SVC. PER MO. CHARGED ON ALL PAST DUE AMOUNTS

ORDER DATE

SHIP VIA

F.O.B.

TERMS

SHIPPING DATE

04/05/12

FEDEX

ORDER DATE

RECIPIENT

1/2 % 10 NET 30

PURCHASE ORDER NUMBER

04/05/12

CONTACT

SALESPERSON

08

BILL OF LADING NUMBER

OHFB15

ITEM ON ORDER QUAN.SHIPPED QUAN. BO

DESCRIPTION

78-600
1-200

47000

47000

MS21919WDG20

06/08/12

Y

REV E

Lot#: UMP86054 1Q12 Qty: 24000

Lot#: UMP86054A 1Q12 Qty: 22800

Lot#: UMP86054A 1Q12 Qty: 200

2

1

GN

FULL_TEST_RPTS

06/08/12

S/C

N

MM

85% SHELF LIFE REQUIRED GN

NOTE: UNDER 150 # SHIP FED X GROUND,

IF OVER 150 # SHIP FED EX NATIONAL LTL

ACCT: 018757

METAL IR#
178578

HEAT TREAT IR#
178769

FINISH IR#
178793

CUSHION IR#
178680
1Q12

LOT-A-178758
1Q12

PACKING SLIP

Page 1

Printed: 05/25/12

14:14:55

TOTAL CARTONS

FEDEX GROUND 033101490

CUSTOMER NO.

SALES ORDER NO.

PURCHASE ORDER NUMBER



A WRITTEN RETURN MATERIAL AUTHORIZATION FORM (RMA) MUST BE OBTAINED FROM UMPCO BEFORE RETURNING ANY MATERIALS FOR CREDIT OR REPLACEMENT. THIS/THESE ARTICLE(S) INSPECTED UNDER "DOD" APPROVED INSPECTION SYSTEM CONFORMS TO AS9100, TS16949 & ISO-9001, CURRENT REVISION. "WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTION 6, 7 & 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14 THEREOF."

UMPCO, INC. 7100 Lampson Ave.
Garden Grove, CA 92841

Authorized Signature Final Inspector

DELIVERY RECEIPT NO. 371125



UMPCO, INC.

MANUFACTURE OF CLAMPS, CLIPS & BRACKETS
7100 LAMPSON AVENUE P.O. BOX 5158 GARDEN GROVE, CA 92846-5158 714-897-3531
WWW.UMPCO.COM

Customer NO.
BEA009

Sales Order NO.
371125



*** THIS IS A BACKORDER ***

SOLD TO B/E AEROSPACE
CONSUMABLES MANAGEMENT
P.O. BOX 025263
MIAMI, FL 33102-5263

SHIP TO SHIPPING DEST CODE MIAM
B/E AEROSPACE CONSUMABLES
MANAGEMENT
9835 NW 14th ST
MIAMI, FL 33172

ASN

CLAIMS FOR ERRORS AND ALL DEDUCTIONS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF INVOICE 1 1/2% SVC. PER MO. CHARGED ON ALL PAST DUE AMOUNTS

ORDER DATE 04/05/12 SHIP VIA FEDEX *FRT ECONOMY* F.O.B. RECIPIENT
PURCHASE ORDER NUMBER 0HFB15 ORDER DATE 04/05/12 CONTACT

TERMS 1/2 % 10 NET 30 SHIPPING DATE 05/29/12
SALESPERSON 08 BILL OF LADING NUMBER 2651964243

ITEM ON ORDER QUAN.SHIPPED QUAN. BO DESCRIPTION

78-600
1-200

47000 47000 MS21919WDG20 06/08/12 Y
REV E

Lot#: UMP86054 1Q12 Qty: 24000
Lot#: UMP86054A 1Q12 Qty: 22800
Lot#: UMP86054A 1Q12 Qty: 200

2 1 GN FULL_TEST_RPTS 06/08/12 S/C N

MM
85% SHELF LIFE REQUIRED GN
NOTE: UNDER 150 # SHIP FED X GROUND,
IF OVER 150 # SHIP FED EX NATIONAL LTL
ACCT: 018757

METAL IR# 178578 HEAT TREAT IR# 178769 FINISH IR# 178793 CUSHION IR# 178680
1Q12
LOT-A-178758
1Q12

CERTIFICATE OF CONFORMANCE

Page 1

Printed: 05/25/12 14:14:55

TOTAL CARTONS 79
FEDEX GROUND 033101490

2-PLTS
TOTAL WEIGHT 1881

PURCHASE ORDER NUMBER

CUSTOMER NO.

SALES ORDER NO.



A WRITTEN RETURN MATERIAL AUTHORIZATION FORM (RMA) MUST BE OBTAINED FROM UMPCO BEFORE RETURNING ANY MATERIALS FOR CREDIT OR REPLACEMENT.
THIS/THESE ARTICLE(S) INSPECTED UNDER "DOD" APPROVED INSPECTION SYSTEM CONFORMS TO AS9100, TS16949 & ISO-9001, CURRENT REVISION.
"WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTION 6, 7 & 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14 THEREOF."
UMPCO certifies that parts shipped on above documents conforms in all respects to applicable specifications and/or standards. Complete physical and chemical test reports as required are on file and available for review. Processing product testing and inspection control of raw material shall be in conformance with all applicable specifications, drawings and/or standards. Products are produced in a mercury free environment. When applicable to DFAR 252-225-7009

UMPCO, INC. 7100 Lampson Ave.
Garden Grove, CA 92841

Authorized Signature Final Inspector

DELIVERY RECEIPT NO. 371125

OHFB15 0

47000 06/07/12

MS21919WDG20

TOTAL O/O: 704

WHSE ONHAND: 989

MINIMUM: 1500

MAXIMUM: 3000

MIAMI BACKORDERS: 704

*04/24/12 005511 SHORT	P613995	100	EA	EA	06/14/12	82VH41	SCHD	(OEM)
05/07/12 008342 AVIAT	001-A035611	50	EA	EA	06/18/12	837L99	SCHD	(OEM) C 15
02/06/12 022483 KAI	4745000103	225	EA	EA	06/26/12	807LJ5	SCHD	(OEM)
02/20/12 022483 KAI	4745000103	225	EA	EA	10/12/12	80PZM9	SCHD	(OEM)
*06/04/12 005511 SHORT	P617951	100	EA	EA	11/22/12	842Y73	SCHD	(OEM)

REM STK XFER 410786 04/25/12 23 015678 L3 COMMUNICATIONS IS

820

900 TO WH-70

14,500 TO WH-2

Warehouse 2: Parts Falling below a 6 Month Trend Quantity

Part No.	Description	Quantity	UOM
MS21919WDG20	CLAMP	14,872	Pcs

BALANCE TO STOCK



Abnahmeprüfzeugnis 3.1 (EN 10204)
Inspection certificate - mill certificate

Nr.: 85295814 01 / 1

Rev. 0

Seite / page: 1 von / of 3

Datum / date: 2011 11 29

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENAS 9100, ISO 14001, NADCAP

Auftraggeber / customer: Bralco Metals 15090 Northam Street LA MIRADA CA 90638 USA	Bestell-Nr. / order no.: 43-97197 Datum / date: 2011 06 30
Warenempfänger / consignee: Bralco Metals 15090 Northam Street LA MIRADA CA 90638 USA	Auftragsbest. Nr. / order confirm. no.: 628380 Datum / date: 2011 07 04
Endkunde, Bestell-Nr. / Your cust., ord. no.: Bralco Metals 15090 Northam Street	Lieferschein Nr. / delivery note: 85295814 Datum / date: 2011 11 30
	Akkreditiv Nr. / letter of credit no.:

Produkt/product Form / form: Coil Werkstoff / material: ALCLAD 2024 Zustand / temper: O Dim. / dim: [inch]: 0,063x48,00 Kundenartikel-Nr / customer article no.:	Bedingungen/terms Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/5A, 09.1998 ASTM B 209 - 07 AMS 4040M, 05.2008 Cessna CMMP019, Rev. D, 27 March 1991 Cessna CMMP025, Rev. R, 5 July 94 Sondervorschrift / special terms: standard grain
--	--

AB-Pos. ord.-item.	BNr./Loz/Tellico Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kolle packno.	Gewicht netto weight net	Stk. pcs.
04	63354/01/00	01/0045415/1	2024	6283800002	4459,877 lbs	1
04	63354/01/00	01/0045035/1	1230	6283800002		

Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)												
Guss Nr. / cast no.	AMAG designation	Al	Cu	Mn	Mg	Zn	Ti	V	Si+Fe	Ti+Zr	Sonstige Elemente	
01/0045035/1	1230											
	actual	99,59	<0,01	<0,01	0,01	0,01	0,02	0,01	0,38	0,02	0,01	
01/0045415/1	2024											
	actual	93,38	0,08	0,10	4,3	0,49	1,5	<0,01	0,01	0,05	0,04	
	actual											



178578

CUSTOMER COPY

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich - www.amag.at
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria - www.amag.at

Sold to: UMPCO INC PO: 22834 Part: 2024 062X 500 Order No.: 180114
TR clerk signature:



Abnahmeprüfzeugnis 3.1 (EN 10204)
Inspection certificate – mill certificate

Nr.: 85295814 01 / 1

Rev. 0

Seite / page: 3 von / of 3

Datum / date: 2011 11 29

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENVA 9100, ISO 14001, NADCAP

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.
We hereby certify that the material described above has been tested and complies with the terms of the order contract.

Werkssachverständiger / factory specialist	E-Mail / e-mail
Klampfer Josef	josef.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

AMAG rolling
Werkssachverständiger
ROL-Nr. 015

Approved UMP 11 5/4/2012 9:16 AM



178578

CUSTOMER COPY

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – www.amag.at
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – www.amag.at

Sold to: UMPCO INC PO: 22634 Part: 2024 062X.500 Order No.: 180114
TR clerk signature:

Al Mag Heat Treat

Hardening ~ Annealing ~ Straightening

: UMPCO, INC

DATE: MAY 16 2012

YOUR P.O. LALM12-137

CERTIFICATION NO.: 78513

We hereby certify that we have Heat Treated the following parts:

40 AN743B12 REV.N/C WO#86155
27 MS21919WDE8 REV.E WO#86594
964 MS21919WDG20 REV.E WO#86054

CUSTOMER COPY



178769

Material: 2024-O HEAT TREATED TO 2024-T42 CONDITION

These parts were heat treated in furnace NO. 15 @ 920 for 25 MIN Hrs.

& _____ @ _____ for _____ Hrs.

& _____ @ _____ for Hrs.

As per: AMS 2770H
Al Mag Heat Treat

By



Accurate Anodizing Inc.

P.O. Box 5207
1801 W. El Segundo Blvd
Compton, CA 90224
Phone: (310) 637-0349 Fax: (310) 637-6099

Specializing in
MIL-A-8625 Type II and MIL-DTL-5541
ISO 9001:2008 CERTIFIED

Certification/Packing Slip

Date	Invoice #
5/22/2012	57026

Bill To
UMPCO INC. P.O. BOX 5158 GARDEN GROVE, CA 92846-5158

Ship To
UMPCO INC. 7100 LAMPSON AVE. GARDEN GROVE, CA 92645

Ship	P.O. Number	Via	Terms	Due Date
5/22/2012	LACC12-142B	OUR DEL.	NET 30	6/21/2012

Quantity	Units	Description	Misc.
964	LBS	Part: MS21919WDG20 Lot/VO: 86054 REV: E Containers: 8 Process: Chem-filmed per MIL-DTL-5541F Type 1 Class 1A (Meets and Supersedes MIL-C-5541E Class 1A), Gold Waste Treatment Surcharge	
		CUSTOMER COPY	



178793

ACCURATE ANODIZING CERTIFIES THAT THESE PARTS WERE PROCESSED IN ACCORDANCE WITH THE PROCESSES OR SPECIFICATIONS LISTED ABOVE. FINISH REQUIREMENTS, THAT ARE NOT REQUIRED TO BE TESTED DIRECTLY, ARE CONTROLLED THROUGH STATISTICAL MEANS AND MONTHLY TESTING; ACCURATE ANODIZING ASSUMES NO RESPONSIBILITY FOR FAILURES RESULTING FROM NORMAL STATISTICAL VARIATION.

Approved by Quality Assurance:

Received By / Date:

05/23/12

Approved UMP 11 5/29/2012 9:28 AM
1Q12



**Production Part Approval -
Material Test Results**

COMPOUND NUMBER CR700802			PART NUMBER DS1020-20X20G (R35312-01)		
NAME OF LABORATORY SHANGHAI INSTITUTE OF RUBBER PRODUCT TESTING CENTER			PART NAME CUSHION		
ASTM SPECIFICATION AMS 3209 L / MIL- C-8603B			ADDITIONAL INFORMATION LOT NUMBER S07133		
TEST ITEM	TEST METHOD	UNIT	SPECIFICATION	SUPPLIER TEST RESULTS	
Hardness ,Shore A	ASTM D2240		70±5	73	x
Tensile Strength	ASTM D412	MPa	≥11.7	13.01	x
Elongation, Die B or C	ASTM D412	%	≥200	323.21	x
Tensile stress at 100% elongation, Die B or C, Stretch specimen to 125% elongation twice within five minutes before testing	ASTM D412	MPa		9.12	x
Tear Strength, Die B	ASTM D624,	KN/m	90±18	91.45	x
Specific gravity	ASTM D297	g/cm ³	1.38±0.02	1.38	x
Heat resistance, 70 h at 100°C	ASTM D573				
Change in hardness, MAX		points	0- +10	7.03	x
Change in tensile strength, MAX		%	-20	-17.36	x
Change in ultimate elongation, MAX		%	-50	-42.45	x
Bend (flat)			No cracking or checking	PASS	x
Immersion in No. 3 Oil, 70 Hours at 100±1°C	ASTM D471				
Change in tensile strength, MAX		%	-50	-42.65	x
Change in ultimate elongation, MAX		%	-40	-37.15	x
Change in Volume, MAX		%	40 to 100	57.89	x
Compression Set(100°Cx70h)	ASTM D395 Method B	%	≤70	62.58	x
Low Temperature Brittleness	ASTM D2137 Method A		-35°C ± 1	PASS	x
Ozone resistance, 125±5°F, 600±30pphm, 4h 50 min at elongation of 70±3% Dumbbell shape specimen. 0.75"x1.5", 0.75" (specimen conditioned by exposure in dry air at 212 ±5°F for 70)	ASTM D 1149	No Craking	pass	PASS	x



178680

CUSTOMER COPY

Signature	Title	DATE
Baoan.Song	Chemist	3/12/2012

Approved UMP 11 5/29/2012 9:31 AM
1Q12



Production Part Approval - Material Test Results

COMPOUND NUMBER CR700802		PART NUMBER DS1020-20X20G (R35312-01)			
NAME OF LABORATORY SHANGHAI INSTITUTE OF RUBBER PRODUCT TESTING CENTER		PART NAME CUSHION			
ASTM SPECIFICATION AMS 3209 L / MIL- C-8603B		ADDITIONAL INFORMATION LOT NUMBER S07134			
Hardness, Shore A	ASTM D2240		70±5	71	x
Tensile Strength	ASTM D412	MPa	≥11.7	12.45	x
Elongation, Die B or C	ASTM D412	%	≥200	312.35	x
Tensile stress at 100% elongation, Die B or C, Stretch specimen to 125% elongation twice within five minutes before testing	ASTM D412	MPa		8.74	x
Tear Strength, Die B	ASTM D624,	KN/m	90±18	92.01	x
Specific gravity	ASTM D297	g/cm ³	1.38±0.02	1.38	x
Heat resistance, 70 h at 100°C					
Change in hardness, MAX	ASTM D573	points	0- +10	8.45	x
Change in tensile strength, MAX		%	-20	-16.45	x
Change in ultimate elongation, MAX		%	-50	-44.36	x
Bend (flat)			No cracking or checking	PASS	x
Immersion in No. 3 Oil, 70 Hours at 100±1°C					
Change in tensile strength, MAX	ASTM D471	%	-50	-46.45	x
Change in ultimate elongation, MAX		%	-40	-35.36	x
Change in Volume, MAX		%	40 to 100	60.09	x
Compression Set(100°Cx70h)	ASTM D395 Method B	%	≤70	64.66	x
Low Temperature Brittleness	ASTM D2137 Method A		-35°C±1	PASS	x
Ozone resistance, 125±5°F, 600±30pphm, 4h 50 min at elongation of 70±3% Dumbbell shape specimen. 0.75"x1.5"*.075" , (specimen conditioned by exposure in dry air at 212 ±5°F for 70)	ASTM D 1149	No Cracking	pass	PASS	x

CUSTOMER COPY



178758

Signature	Title	DATE
Baoan.Song	Chemist	3/19/2012



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23652

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
1	200	EA	MS27039-1-12		45570	MAC FASTENERS		0RPT4	


Jason Lewis
Vice President of Quality

04/08/14

Inv # 04/08/14

CUST PO NO SO NO
***PUR02BPV 380657**
FROM: 800 CLEARWATER LOOP
BILD INDUSTRIES, INC. POST FALLS, ID 83854



CUST PO NO SO NO
***PUR02BPV 380657**
FROM: 800 CLEARWATER LOOP
BILD INDUSTRIES, INC. POST FALLS, ID 83854



CUST PO NO SO NO
***PUR02BPV 380657**
FROM: 800 CLEARWATER LOOP
BILD INDUSTRIES, INC. POST FALLS, ID 83854

SHIP TO

UFC AEROSPACE CORP. INC.
 25 DREXEL DRIVE
 BAY SHORE NY 11706



SHIP TO

UFC AEROSPACE CORP. INC.
 25 DREXEL DRIVE
 BAY SHORE NY 11706

SHIP TO

UFC AEROSPACE CORP. INC.
 25 DREXEL DRIVE
 BAY SHORE NY 11706

[Handwritten signature]

CUSTOMER BILL TO ADDRESS

UFC AEROSPACE CORP., INC.
 P.O. BOX 250
 BAY SHORE NY 11706

COMPLETE CUSTOMER PO NO.

*PUR02BPV

BUYER NAME & PHONE NO.

RHONDA/FAX

BILL TO NO.

SHIP TO NO.

PAGE

UFA001

PACKING SLIP

INSPECT IMMEDIATELY

LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
1		25000	25000	MS27039-1-12	*PUR02BPV	UFA001	SCREW 3x1-5=42
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
2		1	1	FULL CERTS	*PUR02BPV	UFA001	CERTIFICATION
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
1							
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
LINE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION

AUG 23 2010

Thank you for your order

CERTIFICATION OF CONFORMANCE

WE HEREBY CERTIFY THAT THE MERCHANDISE INCLUDED ON THE PACKING LIST IS IN CONFORMANCE WITH AN-MS-NAS OR APPLICABLE SPECIFICATIONS AND OR DRAWINGS.

CAGE CODE 31222

DATE

AUG 18

QUALITY CONTROL MANAGER

[Handwritten signature]

DATE SHIPPED

8/3/10

SHIPPED VIA

US

SIGNATURE - MERCHANDISE RECEIVED

X

TOTAL WT NO. CTNS

210 5

**MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067**

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: BILD INDUSTRIES

DATE: 08/02/09

PO NUMBER: 70926

PART NUMBER: MS27039-1-12

REVISION: 2

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225-7014, ALTERNATE 1 COMPLIANT

LOT NUMBER: 45570

MANUFACTURED QUANTITY: 111,000

MILL HEAT NUMBER: 581950

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in conformance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.


QUALITY ASSURANCE REPRESENTATIVE



MacFasteners, Inc. is an AS9100/ISO9001 Registered Company - PJR# C2009-00297

MAC FASTENERS, INC.
1110 EAST ENTERPRISE
OTTAWA, KS 66067

CHEMICAL & PHYSICAL TEST REPORT

CUSTOMER BILD INDUSTRIES	PO NUMBER 70926	MFG QUANTITY 111,000	DATE 08/02/09
PART NUMBER MS27039-1-12	REV 2	LOT NO 45570	PROCUREMENT SPEC NASM7839

MATERIAL				MATERIAL SPECIFICATION				MILL HEAT NUMBER			SUPPLIER		
TYPE 8740				MIL-S-6049/AMS6322				581950			WIRETECH		
C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	B	Fe	Al	Ti
.42	.24	.94	.009	.009	.15	.43	.41	.22					
	Co	N	Bi	Pb	Mg	Zn		Nb	Sn			Other	

MECHANICAL TEST RESULTS - TESTING PER NASM1312

ULTIMATE TENSILE STRENGTH POUNDS	
3,230	3,230
3,220	324
3,240	3,210
3,220	3,220
3,240	3,240
3,230	
3,250	
3,230	
MIN. REQ. 2500	

DOUBLE SHEAR STRENGTH POUNDS / PSI
TOO SHORT TO TEST PER NASM1312-13
MIN. REQ.

HARDNESS	
ROCKWELL "C" SCALE	
REQ.	28 - 32 HRC
SAMPLE SIZE	13
ACTUAL RESULTS	
31-32 HRC	

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection FED-STD-H28/20 - ASTM B1.3	System <input type="checkbox"/> 21	System <input checked="" type="checkbox"/> 22	System <input type="checkbox"/> 23

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>

TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE RE-PRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.


 Quality Assurance Representative

AS9100, ISO9001 REGISTERED
PJR #C2009-00297



MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

HEAT TREAT CERTIFICATION

CUSTOMER: BILD INDUSTRIES

DATE: 08/02/09

PO NUMBER: 70926

MANUFACTURED QUANTITY: 111,000

LOT NUMBER: 45570

MATERIAL: TYPE 8740

PART NUMBER: MS27039-1-12

REVISION: 2

REQUIRED HARDNESS: 26 - 32 HRC

SAMPLE SIZE: 13

HARDNESS: 31-32 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.




QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100/ISO9001 Registered Company - PJR# C2009-00297



WireTech, Inc.

6440 E. Canning Street
Los Angeles, CA 90040
Phone (323) 722-4933
Fax (323) 721-2738

SOLD TO

Mac Fasteners
1110 Enterprise Street
Ottawa, KS 66067
USA

WORK ORDER
068775

CERTIFICATION

HEAT NO.
581950
SALES ORDER / RLS
830311 / 1
ISO 9001-2000 REGISTERED



MECHANICAL TESTING
CERT # 911.01

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	CARRIERS	LADING NO	SHIPMENT DATE			
38007	8740-187	33,318 Lbs	19	00077738	05/22/2009			
SPECIFICATION M048740-101870A A-8740, AQ, SKFG, CHQ WIRE, SAIP Zinc Phosphate, Lime & Stearate Coating, Size:0.1865/0.1875 Specifications: AMS2301H, AMS6322N, MIL-S-6049A, AMEND. 1, AMS-S-6049-A								
CERTIFICATION REQUIREMENTS								
Chemical Properties								
C	Si	Mn	P	S	Cu	Ni	Cr	Mo
.42	.24	.94	.009	.009	.15	.43	.41	.22
Physical Properties								
Grain Size	Jominy 1	Jominy 2	Jominy 3	Inclusions	Macro	Cleanliness	Mill Source	
6	J5=55	J8=47	J10=43	S2-R1-C2	GCOD	F&S=0	Charter	
Country of Origin								
USA - DFAR Compliant								
Mechanical Properties								
TEST	UNITS					Results		
Tensile Strength	KSI					85.2		
Yield Strength	KSI					72.4		
% Elongation	%					24		
% Reduction of Area	%					72.8		
Rockwell Hardness B Scale	HRB (s)					88		
<p>Merchandise covered by this invoice is warranted to be free from defects in workmanship or material but not for any specific length of time, type or measure of service. No claim for allowance will be recognized unless presented in writing within 10 days time after receipt of material. Our maximum liability for any claim predicated upon defective merchandise is limited to replacement of it, or to repayment of it, or to repayment of the purchase price thereof, as we elect. Material cut to specific length or size cannot be returned for credit and request for cancellation of such orders will not be considered if manufacture has been commenced. Buyer, by acceptance of the merchandise covered by this invoice, agrees to the foregoing terms and conditions and those set forth on the reverse hereof. The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal statutes including Federal law, Title 18, Chapter 47.</p> <p>REPRODUCTION OF THIS CERTIFICATION IS NOT ALLOWED UNLESS IN FULL.</p> <p>Wire Tech, Inc. metallurgical laboratory is accredited in the following test chemical analysis per ASTM E 416, mechanical testing per ASTM A 370, Rockwell hardness per ASTM E 18, metallographic mount preparation per ASTM E 3, decarburization depth per ASTM E 1077, IFI 140, Inclusion rating per ASTM E 45, decarburization performed as per IFI 140. The reported Chemical and Physical Properties are Mill Source results. Transcribed from mill certificates. HRB(W) are hardness results performed with a 1/16" carbide ball. Unless otherwise specified, HRB and HRC results are conversions from ASTM A370 tables 1 and 2. *Test result not covered by our current A2LA accreditation. Tests which have been undertaken by a subcontractor laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, Inc. A2LA accreditation.</p> <p>TEST RESULTS RELATE ONLY TO THE ITEMS TESTED.</p> <p>"LATEST REVISIONS OF ASTM"</p>								
Material is free of mercury, radium, or alpha contamination.								





CHARTER STEEL

A Division of
Charter Manufacturing Company, Inc.

EMAIL

1658 Cold Springs Road
Saukville, Wisconsin 53080

(262) 268-2400

1-800-437-8789

FAX (262) 268-2570

CHARTER STEEL TEST REPORT Reverse Has Text And Codes

Wiretech Incorporated
6440 East Canning Street
Los Angeles, CA 90040-
Attn:

Cast P.O.	6333-1
Lot Part	8740C1A060-C-R
Charter Sales Order	290834
Heat	581950
Ship Lot #	589262
Grade	8740 R SK FG AQ
Process	SA
Finish Size	1/4

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed below and on the reverse side, and that it satisfies those requirements.

Lab Code: 7368

OUTS. MELT SOURCE HEAT NUM. = N/R

Chemistry	C	MN	P	S	SI	NI	CR	MO	CU	SN	V
Wt%	0.42	0.04	0.009	0.009	0.240	0.43	0.41	0.22	0.15	0.009	0.001

	AL	N	B	TI	NE
	0.026	0.0070	0.0002	0.002	0.001

Jominy (HRC)	JOM01	JOM02	JOM03	JOM04	JOM05	JOM06	JOM07	JOM08	JOM09	JOM10	JOM11	JOM12
	58	57	57	58	55	51	51	47	45	43	40	39

	JOM13	JOM14	JOM15	JOM16	JOM18	JOM20	JOM22	JOM24	JOM26	JOM28	JOM30	JOM32
	38	36	36	35	33	32	32	31	30	30	30	30

JOMINY SAMPLE TYPE ENGLISH = B JOMINY LAB = 0358-01

CHEM. DEVIATION EXT.-GREEN = N/R

MACRO ETCH SURFACE = 1 MACRO ETCH RANDOM = 1 MACRO ETCH CENTER = 1

AMS 2301 FRQ AVE = 0.00 AMS 2301 FRQ IND = 0.00

AMS 2301 SEV AVE = 0.00 AMS 2301 SEV IND = 0.00

MAX ALLOWABLE DEFECT = 0.0000
QC DEVIATION EXT.-GREEN = N/R

Test Results of Rolling Lot # 415217

	# of Tests	Test Results of Processing Lot # 569262	Mean Value	
TENSILE (KSI)	2	Min Value 85.3	85.7	85.3
REDUCTION OF AREA (%)	2	64	65	64
ROCKWELL B (HRBW)	2	75	79	77
ROCKWELL C (HRC)	0	0	0	0

TENSILE LAB = 0358-02
RA LAB = 0358-02
RB LAB = 0358-02
RC LAB = N/R

NUM DECARB = 2 FREE FERRITE DECARB = 0.000 FREE FERR & PARTIAL DECARB = 0.001
CP SPHERO % LAB = 0358-02 NUM SPHERO = 2 SPHEROIDIZATION (%) = 80.0
QC DEVIATION EXT.-PROCESSED = N/R

Specifications: Manufactured per Charter Steel Quality Manual Rev B, 12-03-07
Meets customer specifications with any applicable Charter Steel exceptions for the following customer documents:
Customer Document = COP 3010 Revision = N Dated = 12-MAR-2003

Additional Comments: MEETS REQUIREMENTS OF SPECIFICATIONS
AM96322WAMS2301JWIL-S-6049A

Charter Steel
Saukville, WI, USA



Fax number: (262) 721-2738

Rem: Load1, Mail0, Fax0

Page 1 of 1

Janice Barnard
Manager of Quality Assurance
03/30/2009



DE TRAY Plating Works

Specialized Electro-Plating and Polishing
Nickel
Copper
Decorative Chrome
Satin Chrome
Zinc
Cadmium
Passivate
Bright Dip
Strip Copper
Descale

10406 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052
Phone (816) 252-8411 Fax (816) 252-8527 • E-mail: DeTrayPlating@aol.com

July 28, 2009

Mac Fasteners
1110 East Enterprise Street
Ottawa, Kansas 66067

Subject: Certification

This is to certify that the following parts have been stress relieved for 4 hours at 375+/-25 before cleaning cadmium plated per QQ-P-416/AMS-QQ-P-416/NAS4160, Type II, Class 2. Please reference our Invoice #136498 dated 07/28/09 for:

Lot#-45570

P.N.-MS27039-1-12

James T. Pierson, Vice-President



DE TRAY PLATING WORKS





B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23652

LNE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
4	20	EA	MS171539		434108	SPIROL INT'L, STOW,	87739		


Jason Lewis
Vice President of Quality

04/08/14

Page
Brn/Plt

10

B/E AEROSPACE CONSUMABLES MANAGEMENT
9835 NW 14TH ST
MIAMI FL 33172
USA

56488

B/E AEROSPACE CONSUMABLES MANAGEMENT
PO BOX 025263
MIAMI FL 33102-5263
USA

25021

Ord Date 06/21/1
Print date 9/10/1

TERMS: NET 30 DAYS F.O.B.: SHIPPING POINT

NO GOODS MAY BE RETURNED WITHOUT WRITTEN AUTHORIZATION

THE SALE OR PURCHASE IS SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE

PACKING SLIP

Page -
Brn/Plt -2
101**SPIROL**SPIROL INTERNATIONAL CORPORATION
www.spirol.comOrd Date 06/21/11
Print date 9/10/11SHIP TO: B/E AEROSPACE CONSUMABLES MANAGEMENT
9835 NW 14TH ST
MIAMI FL 33172
USA

56488

INVOICE TO: B/E AEROSPACE CONSUMABLES MANAGEMENT
PO BOX 025263
MIAMI FL 33102-5263
USA

25021

TERMS: NET 30 DAYS F.O.B.: SHIPPING POINT

YOUR ORDER NUMBER	DATE SHIPPED	OUR ORDER NO.	SHIPPED VIA
OPVB37		732009-000 SD	FEDEX GRD ACCT #0331-0149-0 DO NOT INSURE

ITEM NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	QUANTITY BACK ORDERED	DESCRIPTION
Line 2.000 CERT OF CONF-44 Pick 09/12/13 EA	1	1	Combinatio	CERT. OF CONFORMANCE WITH RM, FINISH, SHEAR, HARDNESS IF APL LOT CONF Loc .
Line 3.000 CHARGE FINISH-44 Pick 09/12/13 EA	1	1	Combinatio	LOT CHARGE - SPECIAL FINISH LOT ZINC Loc .

NO GOODS MAY BE RETURNED WITHOUT WRITTEN AUTHORIZATION

TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE

SPIROL

Spirol International Corporation

30 Rock Avenue
Danielson, CT 06239-1434

ISO/TS 16949:2002 Certified

Telephone: 860-774-8571
Fax: 860-774-2048
www.spirol.com

CERTIFICATION OF CONFORMANCE

Customer : B/E AEROSPACE CONSUMABLES MANAGEMENT
PO BOX 025263
MIAMI, FL 33102-5263
USA

09/10/2013

Customer Order#: OPVB37

Spirol Order#: 732009-000 SO

Qty	Part Number	Product Description	Lot Number	Heat Number
2000	88291251625	SLTP .125 X 1.625 CP-M	434108	7911925-06

The item described herein is in conformance with the applicable specifications and additional requirements noted below. Inspection and test results are kept on file per applicable specifications and SPIROL International Corporation's internal document control procedures.

Additional Requirements:

Parts Heat Treated To HV423-544

Passivate Per AMS 2700 Method 1 Type 2 (400 Series Stainless) or Type 6 (300 Series Stainless)

Parts meet the minimum shear of: 2100 LBS.

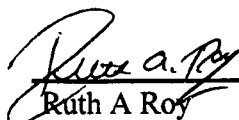
This is to certify that to the best of our knowledge we do not add mercury to any of our processes or products.

Specification Number: NASM-171 Rev - 2

Part Number: MS171539

Material conforms to DFARS 252.225-7009

Parts meet specification AS7207 for ductility Requirements (MS171)



Ruth A Roy
Quality Assurance Inspector

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Manufacturing Quality Products Since 1945

SPIROL

Spirol International Corporation

30 Rock Avenue
Danielson, CT 06239-1434

ISO/TS 16949:2002 Certified

Telephone: 860-774-8571
Fax: 860-774-2048
www.spirol.com

MATERIAL CERTIFICATION

This document certifies the material used to manufacture Lot Number 434108 is made from Heat Number 7911925-06, conforms to the specifications required for Material type UNS S42000, and meets the actual specifications indicated below:

Chemical Analysis:

C (Carbon)	0.25	Si (Silicon)	0.51	Al (Aluminum)	0.002
Mn (Manganese)	0.49	Cr (Chromium)	12.79	Cu (Copper)	0.17
P (Phosphorus)	0.028	Mo (Molybdenum)	0.03	Sn (Tin)	0.006
S (Sulfur)	0.001	Ni (Nickel)	0.23		

Country of Melt: USA

This material is free from mercury contamination.

Date Printed: 07/17/2013

By: 

Title: 

This certification is based on information which has been provided and certified by our supplier to conform to the applicable specifications and is traceable to the original manufacturer through the lot and heat numbers(s) identified. Supplier raw material certificates are maintained on file for audit purposes.

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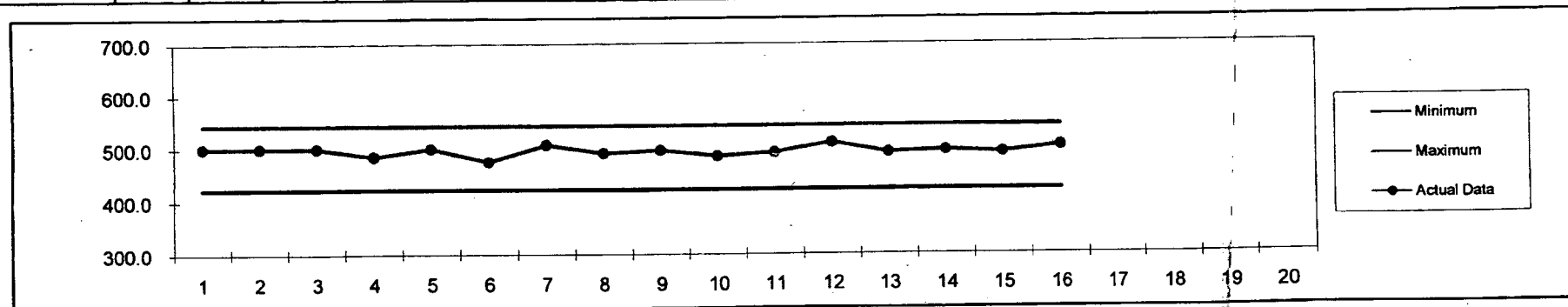


Hardness Certification

SPIROL Item No:	88291251625	Customer Name:	B/E Aerospace																	
Description:	SLTP .125 x 1.625 CP-M	Customer Part No:																		
Work Order No:	434108																			
Heat No:	7911925-06																			
Load:	500G.																			

Test Result (HV)

No Data Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Minimum	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0				
Maximum	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0	544.0				
Actual Data	501.0	501.0	501.0	486.0	501.0	476.0	508.0	492.0	497.0	486.0	493.0	511.0	492.0	496.0	492.0	504.0				



Result:

☒ Pass

☐ Fail

Comments: N/A

Tested By:	Sarah Norton	Title:	QA Inspector	Tested Date:	19-Jul-13															
Approval By:	Ruth Roy	Title:	QA Technician	Approval Date:	19-Jul-13															

SPIROL

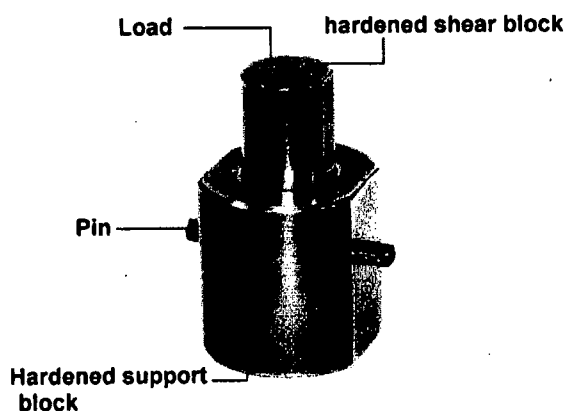
Spirol International Corporation

30 Rock Avenue
Danielson, CT 06239-1434

ISO/TS 16949:2002 Certified

Telephone: 860-774-8571
Fax: 860-774-2048
www.spirol.com

SHEAR TEST REPORT



Double Shear tests are performed in accordance with ASME B18.8.2,
ASME B18.8.4M and ISO 8749 respectively.

Lot Number	434108
Description	SLTP .125 X 1.625 CP-M
Item Number	88295002000
Heat Number	7911925-06
Shear Block Size	.125
Minimum Shear	2100 LBS.
Operator Name	RUTH ROY

Testing is performed on a calibrated Instron Model 3384

Test date: Friday, June 28, 2013

	Max Load (lbf)	Max Extension (in)
1	2609.28	0.074
2	2623.12	0.071
3	2615.86	0.074
4	2512.88	0.072
5	2706.23	0.074
6	2659.88	0.074
7	2689.45	0.074
8	2671.04	0.074
9	2703.21	0.075
10	2671.67	0.074
11	2561.50	0.068
12	2681.73	0.073
13	2451.99	0.070
14	2750.99	0.078
15	2604.17	0.070

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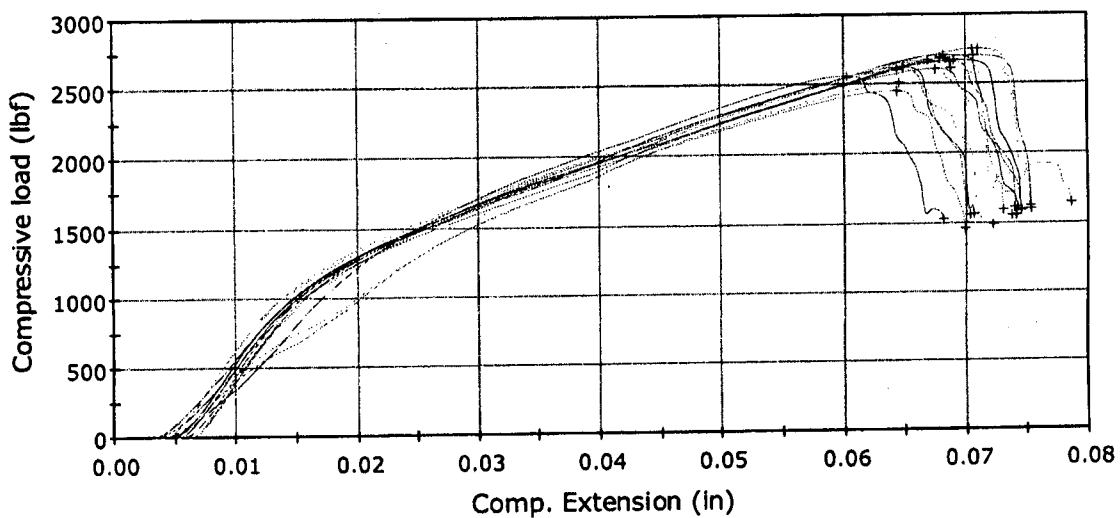
30 Rock Avenue
Danielson, CT 06239-1434

ISO/TS 16949:2002 Certified

Telephone: 860-774-8571
Fax: 860-774-2048
www.spirol.com

	Max Load (lbf)	Max Extension (in)
16	2752.24	0.075
Mean	2641.58	0.073
Minimum	2451.99	0.068
Maximum	2752.24	0.078
Standard Deviation	81.88	0.003

Specimen 1 to 16



Notes

All shear tests performed on these pins meet the minimum specifications and requirements.

Inspector: *[Signature]*

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RAMBALL TESTLAB, INC.

1703 INDUSTRIAL HIGHWAY - UNIT 3
CINNAMINSON, NJ 08077-2546

PHONE: (856) 786-8880

FAX: (856) 786-3144

LABORATORY REPORT

Submitted to:
Spirol International Corporation
30 Rock Ave.
Danielson CT 06239
ATTN: Quality Dept.

7/23/2013

P.O. Number: 173529
Lab Number: 337292
Page 1 of 1

Item: SLTP .125 x 1.625 CP-M
Material: 420 SS Low Carbon
Part Number: 88291251625
Lot Number: 434108
G/L Account Number: 113.30360
Item Number: 42978

EXAMINATION OF MICROSTRUCTURE

Test Specification: SAE AMS 7207

Acceptance Criteria: Microstructure shall be tempered martensite and
shall be free from grain boundary carbide network.

Disposition: Acceptable


Joel Muzik
Quality Manager

We certify that the above results are correct as contained in the records of this company. This report shall not be reproduced, except in full, without the permission of Ramball Testlab, Inc. Testing is performed in accordance with the appropriate method identified in the above listed product or material specification. The method of testing is performed in accordance with the current revision at the time of test, unless otherwise specified. The recording of false, fictitious or fraudulent statements or entries on this document may be punishable under federal statutes including Federal Law, Title 18, Chapter 47. We are an ISO 17025 Accredited Laboratory, by multiple agencies. Testing and or inspections were performed in accordance with Ramball Testlab Quality Manual Rev. 12. AZLA Certificate Number: 142.01. During test and inspections this product did not come in direct contact with mercury or any of its compounds, nor with any mercury-containing device employing a single boundary of containment.